

10/530066

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)
PCT/US2003/031326 29 MAR 2005

(19) World Intellectual Property Organization International Bureau

(43) International Publication Date
15 April 2004 (15.04.2004)

PCT

(10) International Publication Number
WO 2004/031709 A2(51) International Patent Classification⁷:

G01L

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/US2003/031326

(22) International Filing Date: 2 October 2003 (02.10.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/415,373

2 October 2002 (02.10.2002) US

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant and

Published:

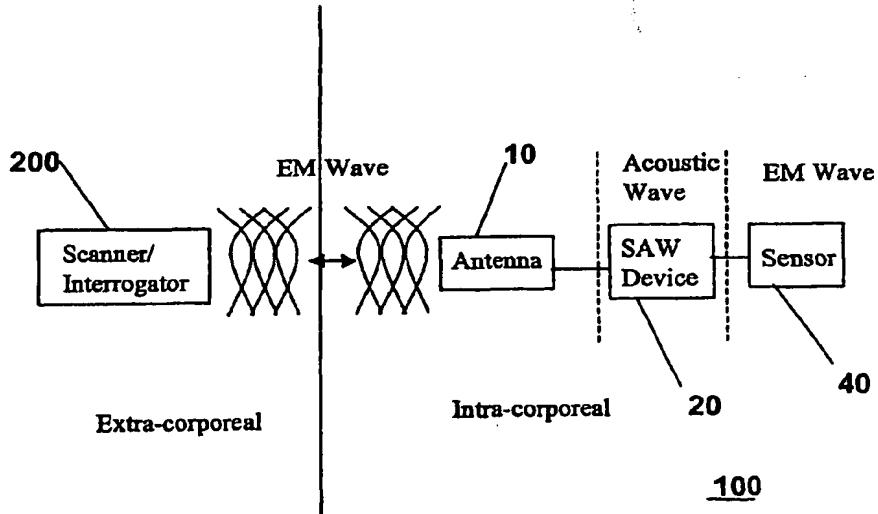
(72) Inventor: KAIN, Aron, Zev [US/US]; 1 Jodi Court, Wesley Hills, NY 10952 (US).

— without international search report and to be republished upon receipt of that report

(74) Agents: HELFGOTT, Samson et al.; Katten, Muchin, Zavis, Rosenman, 575 Madison Avenue, New York, NY 10022-2585 (US).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: WIRELESS SYSTEM FOR MEASURING PRESSURE AND FLOW IN TUBES



WO 2004/031709 A2

(57) Abstract: A remote sensor (100) is remotely placed within a vessel containing a fluid in order to sense a pressure generated by the fluid. The sensor includes an antenna (10) for capturing an externally-generated interrogation signal and for transmitting a response signal, a response circuit (20, 30) coupled to the antenna (10) for receiving the interrogation signal and for generating the response signal, and a sensor element (40) coupled to the response circuit (20, 30) for generating a response signal in relation to the sensed pressure. One or more electrical characteristics of the response circuit (20, 30) change in relation to the sensed pressure, thereby determining measurable characteristics of the response signal. Importantly, the response circuit (20, 30) operates to delay the transmission of the response signal to a time separated from and following transmission of artifacts of the interrogation signal.